Office of the Commissioner for Aquaculture Development

OCAD
BCDA

Study No. 4

Review of Provincial and Territorial Program and Services in the Aquaculture Sector

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by

FACILITATING
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FOREWORD

This study is one of seven background studies commissioned or prepared by the federal Office of the Commissioner for Aquaculture Development (OCAD) as part of its review of the federal role in aquaculture.

In order to provide a report on the federal role for the Minister of Fisheries and Oceans, the Office of the Commissioner has undertaken a series of background studies pertaining to aquaculture. The studies are:

Study 1 : Current Status and Potential of the Canadian Aquaculture Industry: a review of the context in which the Canadian aquaculture industry is evolving today, and an assessment of its potential for future growth;

Study 2 : International Fish and Seafood Markets: a Canadian perspective: a review of general trends in international fisheries products markets (commercial fisheries and aquaculture) in light of major markets targeted by Canadian aquaculture products;

Study 3 : Market Outlook in the International Fish and Seafood Sector: Alternative Products/Uses and Food Safety Issues: a review of general trends affecting the value-added of fisheries products, new uses for products derived from aquaculture and commercial fisheries (pharmaceutical products, nutraceuticals, etc.), and issues affecting food safety, especially in terms of consumer behaviour and regulatory changes affecting international trade;

Study 4 : Review of Provincial and Territorial Program and Services in the Aquaculture Sector: a review and analysis of all programs and services provided to the Canadian aquaculture sector by provincial government ministries/departments and agencies;

Study 5 : Review of Federal Programs/Initiatives in support of Aquaculture: a review and analysis of all programs and services provided to the Canadian aquaculture sector by various federal government departments and agencies;

Study 6 : Federal Programs and Services for Five Resource-Based Industries: a comparative analysis of how the aquaculture sector is treated by the Canadian government, in comparison with four other primary sectors : agriculture, forestry, commercial fisheries and biotechnology;

Study 7 : The International Context for Aquaculture Development: Growth in Production and Demand and Long-Term Outlook: a review and comparative analysis of the international context and resulting major trends that will affect the development of aquaculture at the global, national and regional levels; includes an overview of policies, governance structures, programs and services in place in various countries to provide a framework and support for industry, and to foster smooth development of aquaculture; and, the lessons for Canada.

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Introduction

This report provides contextual information to support the program of work, during the second mandate of the Commissioner for Aquaculture Development.

In the preparation for this report, key informants in each of the provincial and territorial governments assisted in the identification, transfer and review of the materials.

This report is organized into four major sections. Section one provides a brief overview of the types of programs and services that are being provided and makes some preliminary observations about the nature and extent of provincial offerings.

Section two provides a summary of programs and services by type and by province.

Section three provides a detailed review of programs and services in support of aquaculture by province.

Section four provides detailed charts summarizing the information covered in sections two and three.

This report provides a snapshot in time. During the preparation phase of this project, provinces were in the process of changing their descriptions of program offerings. The nature and extent of provincial and territorial programs and services will no doubt continue to develop in the short and medium term.

General Observations

The comments provided below are derived from a review of the documentation which has been provided for the preparation of this report. The purpose of this report is to compile data to support a subsequent program of review and analysis to support the public policy making process. Nevertheless, some observations can be made.

- The information in this report will need to be compared to the known situations in at least five other areas. These include the programs and services provided by federal agencies, regional and national associations, local agencies, post secondary educational institutions, and industry players.
- It is noteworthy that Atlantic Canada is reliant on the Federal- Provincial agreements to initiate support to this sector. The extent to which the types of programs offered in each of the Atlantic provinces is a function of their provincial policy process or a hybrid of federal-provincial negotiations is not evident. However, there is a similar look to the range of initiatives in those provinces.
- In addition to Atlantic Canada, Quebec an British Columbia demonstrate an impressive array of support.
- The inland provinces and the territories do not evidence much direct support to the sector.

The information in this report has been grouped according to the following specific types of programs and services, which:

- Support production or production enhancements
- Support processing or processing enhancements
- Facilitate technology development
- Assist marketing effectiveness
- Address environmental issues
- Provide technical support
- Provide training/mentoring
- Support or engage in research
- Provide veterinary services
- Support advisory committees

Some brief observations follow, which stem from a review of the documentation.

Support for Production

- Support for production activities extends across all provinces with the exception of Alberta, which has indicated an intention to develop a capability in this area.
- In inland provinces, (Ontario, Manitoba and Saskatchewan) there is a reliance on generic agricultural/economic development programs, which must be accessed by the aquaculture sector, in order to receive financial assistance.
- Programs and services to support production activities within aquaculture specifically have an emphasis on financial loans and loan guarantees.
- Newfoundland and PEI appear focused on a diversification strategy which includes specific species support.
- It may be that Quebec offers the broadest range of financial support mechanisms to support production.
- British Columbia has a broad range of initiatives, which with the exception of the Shellfish Aquaculture Working Capital Fund, is characterized by not being focused on direct financial support to entrepreneurs.

Support For Processing

- Newfoundland, Nova Scotia and PEI have programs which specifically include support for improvements in the processing of product.
- The support for processing noted above is relatively recent, in comparison to other aspects of industry support. Given that these programs are in Atlantic Canada, this may reflect a regional need. The processing industry may also be outside the parameters of a traditional definition of the aquaculture industry.
- British Columbia does not offer specific support for processing of aquaculture products.

Support For Technology

- Technology development at aquaculture operations may be occurring as consequence of the various forms of financial support programs, however, the number of programs which are directed explicitly at new technology development are quite limited.
- The support for technology has two broad targets. First, there is support to establish new technologies to mitigate the environmental impacts of the industry. British Columbia is quite focused on this aspect. Second, there is an interest in the development of new technologies to increase the effectiveness and efficiency of production.

Support for Market Development

- Newfoundland and Quebec are demonstrating leadership in their support for marketing initiatives. Each province has dedicated programs to support the marketing function of aquaculture entrepreneurs. This extends to financial support for international trade promotion.
- It is noteworthy that marketing, along with processing, is a type of support for which British Columbia does not provide explicit assistance. This may reflect a policy perspective.

Support for the Environment

- British Columbia has an aggressive series of programs to respond directly to environmental considerations.
- The degree of pro-activeness of British Columbia is reflected specifically in the farm relocation initiative. In addition, there are dedicated programs related to planning, siting, and piloting and escape prevention.

Technical Support

- All provinces provide some level of technical support including information services. The nature and extent of technical services however differ across the country.
- Atlantic Canada is operating with a community-based economic development model which includes having knowledgeable staff available to assist applicants for financial assistance. Staff are also working with industry participants on collaborative research projects at the community level.
- It would appear that a significant limiting factor in the depth of the extension services, is the number of staff attached to each aquaculture department.
- British Columbia's technical service seems to be driven in large part by the environmental agenda it must manage.

Support for Training

- Training is occurring at advanced levels. The University of Guelph is but one example where post-graduate education is available.
- Practical industry training is available in selected areas. Most noteworthy is the Nova Scotia Mentorship Program.
- There are numerous opportunities for short programs for basic aquaculture training. Ontario and Alberta offer day programs.

Support for Research

- This review of provincial programs does not reflect the full extent of research being undertaken at provincial institutions. The funding programs, which have been documented, reflect several trends.
- Ontario and Quebec have programs, which support basic research.
- British Columbia and Quebec have made significant investments in support of applied research.
- The research agenda in Atlantic Canada, which is financed by aquaculture programs, appears to be project-driven.

Support for Veterinary Services

- In Atlantic Canada, veterinary services are available in connection with existing provincial laboratories, where diagnostics and field trials are conducted. Veterinary services to individual operators, however, are constrained by the lack of dedicated field staff.
- Quebec has a unique veterinary service, which is available to operators in the industry throughout the province. The program includes mechanisms for local veterinarians to provide services on a subsidized, fee for service basis.

Support for Advisory Committees

- The use of formal advisory committees may be more extensive than has been reported. However, Nova Scotia, New Brunswick and British Columbia have explicitly highlighted the role of advisory committees.

A Summary of Programs and Services by Type of Support

Support for Production

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Fisheries Diversification Program ➲ Atlantic Cod Grow-out Program ➲ Mussel Production Incentive Program ➲ Mussel Technology Program ➲ Shellfish Aquaculture Working Capital Fund	➲ Fisheries and Aquaculture Loan Board ➲ Fisheries and Aquaculture Development Program ➲ Atlantic Canada Opportunities Agency ➲ Canada/ N. S. Co-op Agreement ➲ Aquaculture Development Committee ➲ Regional Aquaculture Advisory Committee	➲ Fisheries Development Board ➲ Total Development Fund	➲ Rental Incentive Program ➲ Aquaculture Technology Program ➲ Aquaculture Diversification Program ➲ Shellfish Aquaculture Financing Program	➲ Financial support for concerted action in the commercial fisheries and aquaculture sectors ➲ Innovation and development support for the commercial fisheries and aquaculture sectors ➲ Quality support program for small agrifood businesses ➲ La Financière agricole du Québec (Quebec agricultural and agri-food financing organization)

Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
➲ University of Guelph Aquaculture Centre ➲ Rural Economic Development Initiative (OSTAR)	➲ Agricultural Credit - Program	➲ REDA Enhancement Fund ➲ SBLA Program ➲ Cooperative Development Assistance Program ➲ Agriculture Development Fund		➲ Shellfish Development Initiative ➲ Pilot Project Technologies Initiative (Finfish) ➲ Quality Control (Shellfish) ➲ Planning & Capability Studies ➲ Research & Development Support Programs ➲ Shellfish Aquaculture Working Capital Fund

A Summary of Programs and Services by Type of Support

Support for Processing

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Atlantic Cod Grow-out Program ➲ Processing and Marketing Product Development ➲ Shellfish Aquaculture Working Capital Fund	➲ Fisheries and Aquaculture Development Program ➲ Atlantic Canada Opportunities Agency ➲ Canada/ N. S. Co-op Agreement		➲ Test Production Program	
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
		➲ Agriculture Development Fund		

A Summary of Programs and Services by Type of Support

Support for Technology Development

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Aquaculture Technology Program			➲ Aquaculture Technology Program	
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
➲ University of Guelph Aquaculture Centre				➲ Pilot Project Technologies Initiative (Finfish)

A Summary of Programs and Services by Type of Support

Support for Market Development

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Fisheries Diversification Program ➲ Atlantic Cod Grow-out Program ➲ Processing and Marketing Product Development ➲ Market Research/ Market Intelligence ➲ Industry Prospecting	➲ Atlantic Canada Opportunities Agency	➲ Total Development Fund ➲ Trade Assistance Program		➲ Small and micro-business marketing support program ➲ Horizon Export: Biofood export development program ➲ Quality support program for small agrifood businesses
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
		➲ Agriculture Development Fund		

A Summary of Programs and Services by Type of Support

Support for Environmental Issues

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
			➲ Aquaculture Technology Program	

Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
➲ University of Guelph Aquaculture Centre				➲ Provincial Escape Prevention Initiative ➲ Shellfish Development Initiative ➲ Pilot Project Technologies Initiative (Finfish) ➲ Siting Advice & Technical Assistance (Finfish & Shellfish) ➲ Farm Relocation Initiative

A Summary of Programs and Services by Type of Support

Technical Support

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Atlantic Cod Grow-Out Program ➲ Shellfish Extension Program ➲ Finfish Extension Service	➲ Aquaculture Development Committee	➲ Hatchery Review Committee ➲ Total Development Fund	➲ Mussel Monitoring Program	
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
➲ University of Guelph Aquaculture Centre			➲ Information Service & Technical Support	➲ Siting Advice & Technical Assistance (Finfish & Shellfish)

A Summary of Programs and Services by Type of Support

Support for Training

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
	➲ Aquaculture Mentorship Program		➲ Aquaculture Research Program	
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
➲ University of Guelph			➲ Raising Fish in Ponds	➲ Research & Development Support

A Summary of Programs and Services by Type of Support

Support for Research

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Fisheries Diversification Program ➲ Mussel Technology Program	➲ Fisheries and Aquaculture Development Program ➲ Aquaculture Development Committee	➲ Total Development Fund	➲ Aquaculture Technology Program ➲ Aquaculture Research Program	➲ Financial support for concerted action in the commercial fisheries and aquaculture sector ➲ Innovation and development support for the commercial fisheries and aquaculture sector ➲ Continental aquaculture research & development corporation (SORDA) ➲ Mariculture development corporation (SODIM)
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
➲ University of Guelph		➲ Agriculture Development Fund		➲ Provincial Escape Prevention Initiative ➲ Fish Health Data Base ➲ Shellfish Development Initiative ➲ Pilot Project Technologies Initiative (Finfish) ➲ Quality Control (Shellfish) ➲ Planning & Capability Studies ➲ Research & Development Support Programs

A Summary of Programs and Services by Type of Support

Support for Veterinary Services

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Fish Health/Veterinary Services	➲ X	➲ Fish Health Technical Committee ➲ Fish Laboratory		➲ Autopsies: pathology laboratories, Epidemic monitoring and animal health branch ➲ Food quality and animal health (QASA) ➲ Health certification program for fish farms producing eggs and hatchlings.
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
➲ University of Guelph				➲ Fish Health Initiative Disease Surveillance and Auditing ➲ Fish Health Data Base ➲ Fish Health Working Committee

A Summary of Programs and Services by Type of Support

Support for Advisory Committees

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
	➲ Regional Aquaculture Advisory Committee	➲ Fish Health Technical Committee ➲ Hatchery Review Committee		
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
				➲ Fish Health Working Committee

A Review of Programs and Services in Support of Aquaculture

Newfoundland

Program Name	Budget/Funding	Criteria	Comments

Fisheries Diversification Program
➲ Category:
  ➲ Production
  ➲ Research
  ➲ Marketing
	➲ Projects initiated by private enterprise and fishers may be funded on a cost-shared basis up to 60 per cent of eligible costs. However, high risk projects, or projects carried out by public or non-profit organizations may be considered for increased levels of funding where the potential for significant industry-wide benefit exists.
	➲ Direct contributions from other government sources will result in a proportional reduction in assistance from the FDP.
	➲ The maximum contribution for any one project did not normally exceed $100,000. *Commercial projects in excess of $100,000 in federal government funding will be subject to the federal government's repay-ability policy.*
	➲ The FDP is a $10M program administered by the province and Canada.
		➲ Research and development institutions, regional development groups and public/private partnerships are eligible. Eligible public organizations must be involved in some aspect of the harvesting, processing, and marketing of fish products in association with licensed Newfoundland and Labrador fishing enterprises or processing establishments.
		➲ Eligible activities will include, but not be limited to: new value-added harvesting and processing technology, grow-out of wild species, test fisheries and commercial surveys, product development, productivity enhancement, export market development, quality improvement for product and raw material, and opportunity identification.
		➲ Activities NOT Eligible under FDP include: traditional aquaculture activities (defined as the culturing of commercial species - salmon, steelhead trout, mussels, and scallops - through their whole life cycle, from egg through to the sale of primary product)
			➲ The objectives of the program are to:
			➲ Diversify the province's fishing industry in an environmentally sustainable manner
			➲ Maximize the value of the fishing industry to the provincial economy;
			➲ Pursue research and/or development initiatives that are of long-term industry-wide benefit; and
			➲ Make the benefits of research and/or development initiatives available to the whole industry.

A Review of Programs and Services in Support of Aquaculture

Newfoundland

Program Name	Budget/Funding	Criteria	Comments

Atlantic Cod Grow-out Program
➲ Category:
  ➲ Production
  ➲ Processing
  ➲ Technical support
  ➲ Marketing
	➲ Part of the Fisheries Diversification Program funding.
	➲ The existing cod projects total $200,000 – no new proposals are being received at Sept. 2002.
		➲ This year, there are four projects being delivered under this program, which include technical support, fish health, market development, and processing/handling issues.
		➲ Must provide support to the entire cod grow out sector
			➲ In 2000 a $622,000 three year Atlantic Cod Grow-Out Program was implemented. This program provides support services for the industry, and is currently coordinated by the Department of Fisheries and Aquaculture and funded through the Fisheries Diversification Program of the Canada/Newfoundland Agreement for the Economic Development Component of the Canadian Fisheries Adjustment and Restructuring Initiative.

Aquaculture Technology Program ➲ Category: ➲ Technology	➲ 2002 annual budget of $150,000 ➲ Phase 1 New Technologies -Assistance is in the form of a grant, normally to a level of 60% of eligible costs, to a maximum of $10,000 per project. ➲ Phase 2 Technology Upgrades –Assistance in the form of a grant, normally to a level of 50% of eligible costs, to a maximum of $10,000 per project. ➲ In the event that a proposal receives a non-repayable contribution from other public sources, the funding from this program will be reduced such that the combination of all such funding will not exceed 75%.	➲	➲ The purpose of the Aquaculture Technology Program is to assist commercial aquaculture operations to evaluate, develop and adopt new techniques and /or technologies that expand production, reduce production costs, or increase product quality.

A Review of Programs and Services in Support of Aquaculture

Newfoundland

Program Name	Budget/Funding	Criteria	Comments

Processing and Marketing Product Development
➲ Category:
  ➲ Marketing
  ➲ Processing
	➲ Total budget for any one year is approximately $100, 000 - $150,000.	➲ The Division continues to work on the development of new packaging technology and market development initiatives for sea urchin roe. Emphasis is being placed on re-developing saltfish processing technology and markets, and diversifying the product line for saltfish products.
		➲ The industry in recent years processed a large variety of secondary and value-added seafood products. Among the range of products produced are marinated and pickled products, smoked, and entree products, dried shell by-products, surimi based, breaded, and specialty dried products. Newly established companies process consumer ready entrees, such as salmon, crab and secondary mussel products, as well as shrimp cocktail and seafood salsa.
		➲ Consumer demand for convenience foods in the industrialized world continues to grow, and, given the resource declines in our traditional fisheries, the industry must further diversify to meet the growing demand for a wider variety of "oven-ready" and other consumer friendly products. This includes the production of high valued, portion-controlled products from a variety of groundfish species as well as similar products from salmon and cod farming operation.
		➲ Special emphasis was placed on the full utilization of waste products from shellfish, aquaculture and pelagic species.
			➲ The Processing and Marketing Division continues to focus efforts towards product development of secondary products and underutilized species. The province's large volume of shell by-products, from the crab and shrimp industries, have enormous potential for development and work is ongoing to establish several chitin/chitosan extraction facilities for the province.

A Review of Programs and Services in Support of Aquaculture

Newfoundland

Program Name	Budget/Funding	Criteria	Comments
Mussel Production Incentive Program ➲ Category: ➲ Production Support	➲ Allocations of $300,000 and $200,000 in 2000/01 and 2001/02 respectively, were available ➲ 2002 Budget of $100,000 ➲ Assistance in the form of a grant normally to a level of 50% of eligible project costs, for new gear that the proponent can demonstrate increases production over previously planned levels.	➲ Any individual, partnership or incorporated company, holding a commercial mussel aquaculture licence in Newfoundland, and who is in good standing with the Department of Fisheries and Aquaculture (DFA), ACOA and DITRD with respect to any loans, may be eligible. There is a requirement for a minimum production of 25,000kg or a minimum deployment of 10,000 collectors or 10,000 socks in either of the two previous years. ➲ Under this program, the Department of Fisheries and Aquaculture may provide a non-repayable contribution normally up to 50% of eligible project costs for projects that the proponent can demonstrate increases in production.	➲ (note: this program is awaiting, decisions to proceed in the current year) ➲ The purpose of the program is to provide capital for shellfish growers for projects related to the production, harvesting and processing of eligible shellfish species. ➲ The first repayment is scheduled for fall 2002. ➲ Developed to assist mussel growers achieve increases in production that are incremental to planned farm development.
Shellfish Aquaculture Working Capital Fund ➲ Category: ➲ Production ➲ Processing	➲ $1.5 Million revolving Fund. ➲ Funding will consist of loans up to 30% of eligible project costs to a maximum of $ 250,000. ➲ Loan applicants will normally be required to provide a minimum of 20% equity contribution. Where evidence of significant applicant commitment exists, the Loan Committee may, at its discretion, reduce the minimum equity requirement and may authorize assistance up to 50% of eligible project costs.	➲ Eligible businesses must be a private sector, full-time, blue mussel or scallop producer holding a commercial leasehold aquaculture license. ➲ Marine shellfish culture enterprises with sufficient water available to potentially produce: 300,000 pounds of blue mussels annually (normally around 40 hectares) or: a minimum capacity of 1 million scallop spat annually (normally around 15 hectares), and blue mussel processors holding a primary processing licence with the ability to demonstrate a minimum historic processing throughput of 100,000 pounds annually.	➲ The purpose of this program is to provide capital for shellfish growers for projects related to the production, harvesting and processing of eligible species. This can include the cost of land, goodwill, motorized vehicles or vessels not used exclusively for initiatives funded and asset costs in excess of fair market value, restructuring of existing debt, or plant processing related cost. ➲ There are approximately 7 years remaining in the program.

A Review of Programs and Services in Support of Aquaculture

Newfoundland

Program Name	Budget/Funding	Criteria	Comments
Shellfish Aquaculture Working Capital Fund (cont'd)	➲ In exceptional circumstances, where the initiative demonstrate the potential for significant economic impact, the maximum level of assistance authorized may be up to $ 500,000. ➲ Maximum term of 10 years at a fixed rate set at prime + 1%.	➲ Eligible aquaculture species will initially be limited to blue mussels and sea scallops, and initiatives with total project costs under $100,000 will not be considered. ➲ No new proposals are being accepted into the program.	
Fish Health/ Veterinary Services ➲ Category: ↳ Veterinary Service	➲ Total 2002 budget allocation of $195,000.	➲ A fully equipped fish health laboratory is operated in Bay d'Espoir along with additional lab facilities in St. John's.	➲ The purpose of the extension service is to provide continuous pro-active aquaculture health services to the finfish and shellfish industries as a means for early detection, prevention and treatment. ➲ Veterinary services are provided to finfish and shellfish growers to help them address any fish health issues that may hinder the development of a particular sector.
Industry Prospecting ➲ Category: ↳ Marketing	➲ Total 2002 budget allocation of $95,000.	➲ This is a service provided to the industry as a whole.	➲ The Department of Fisheries and Aquaculture has recognized that the Connaigre Peninsula, Outer Bay d'Espoir and the north portion of Fortune Bay has potential for the four commercial priority species. Both public and private sector investment into this geographic area is necessary if the potential opportunities are to be turned into reality. This program will address the public contribution to this investment equation.

A Review of Programs and Services in Support of Aquaculture

Newfoundland

Program Name	Budget/Funding	Criteria	Comments
Market Research/ Market Intelligence ➲ Category: ↳ Marketing Service	➲ Total 2002 budget allocation of $60,000.		➲ Provides research, collection and distribution of market information by maintaining an overview of current market conditions for all major species, and the identification of market opportunities for emerging fisheries.
Shellfish Extension Services ➲ Category: ↳ Technical Support	➲ Total Budget allocation of $82,000.	➲ This service is offered to the industry as a whole.	➲ Biological/Productivity Monitoring - This program will continue monitoring related to improved productivity (i.e. environmental and larval monitoring) developed under the Aquaculture Component of the Economic Renewal Agreement (ACERA). The objective is to continue the gathering of environmental data related to biophysical site characteristics within the five major areas of mussel aquaculture within the province. ➲ Quality Management Controls - Quality assurance and management programs can be the first step and smaller components of larger and more comprehensive quality control approaches such as the Hazards Analysis Critical Control Points (HACCP) method.

A Review of Programs and Services in Support of Aquaculture

Newfoundland

Program Name	Budget/Funding	Criteria	Comment
Finfish Extension Services ➲ Category: ➲ Technical Support	➲ Total 2002 budget allocation of $83,000.	➲ This service is offered to the industry as a whole.	➲ Code of Containment - Compliance with, and adherence to, the Code of Containment is essential to the continued use of diploid strains of fish in Bay d'Espoir. Therefore much attention will be directed to ensuring the approaches that have been developed are working and delivering the type and amount of information required by the Code. ➲ Quality Management Methods - This project will focus on introducing and developing quality assurance and management programs on the farm for the long term by assisting growers and processors to adopt techniques and technologies to maximize quality from the farm to the plant. ➲ Human Resources Development - This project will provide financial support to companies to continue upgrading the knowledge and skill base of employees from managers to site workers. Emphasis will be placed on company-to-company skills transfer to expose the personnel to the best private sector techniques available.

A Review of Programs and Services in Support of Aquaculture

Nova Scotia

Program Name	Budget/Funding	Criteria	Comments
Aquaculture Mentorship Program ➲ Category: ↳ Mentorship/ Training		➲ Clients work on the farm as any other employee would, learning first-hand the techniques, schedules, procedures, problems and solutions aquaculturists encounter every day. Written assignments must also be completed and submitted to the school during directed learning work terms.	➲ Clients spend a total of 10 weeks in the classroom in Pictou, where trained instructors and featured guest speakers offer information ranging from safety procedures, veterinary skills to entrepreneurship, record-keeping and managing a small business. They spend the remaining 30 weeks on location with their mentors.
Fisheries and Aquaculture Loan Board ➲ Category: ↳ Production	➲ The Fisheries and Aquaculture Loan Board operates with a total capitalization of $25M.	➲ The direct loans are available for salmonoid seed stock, shellfish seed/spat, collection materials, grow-out equipment and materials. In addition the following are eligible – rafts, buoys, flotation devices, anchors, nets, cages for finfish grow-out, small boats, outboard motors and onboard gear handling devices. ➲ Direct loans are not available for motor vehicles, real estate, and feed. ➲ Repayment schedule: ↳ Finfish fry – upon harvest ↳ Finfish equipment – 10 years max ↳ Mussel spat – upon harvest ↳ Mussel equipment – 12 years max ↳ Oyster spat – upon harvest ↳ Oyster equipment – 15 years max ➲ Aquaculture working capital loan guarantees for feed or operating costs are available through the chartered banks. Amounts are flexible, bank rules apply, and the line of credit must revolve through each growing cycle.	➲ The Fisheries and Aquaculture Loan Board will directly finance fish, shell stock and related grow-out and hatchery related equipment (not feed). ➲ Aquaculture working capital loan guarantees for feed or operating costs are available through the chartered banks.

A Review of Programs and Services in Support of Aquaculture

Nova Scotia

Program Name	Budget/Funding	Criteria	Comments

Fisheries and Aquaculture Development Program
➲ Category:
  ➲ Processing
  ➲ Production
  ➲ Research
	➲ Maximum funding is $50,000. Assistance may vary from 25% to 100% of eligible costs depending on project particulars.	➲ Technology transfers involving development, research projects or travel missions are eligible.	➲ Assistance is available and is designed to support new or improved harvesting and processing technology, aquaculture development and new community-based infrastructure.

Support to Aquaculture by Atlantic Canada Opportunities Agency
➲ Category:
  ➲ Production
  ➲ Processing
  ➲ Marketing
	➲ This program will provide repayable loans as a percent of capital costs to the following limits to a maximum of $500,000.
	➲ 50% - expansion of traditional/existing production facilities.
	➲ 50% - start-ups of new establishments, modernizations or products.
	➲ 75% - hiring consultants or marketing / consultant studies, marketing activities, product R&D, pilot plants, productivity improvement etc.
	➲ Repayable loans are unsecured and non - interest bearing for three years with incremental increases in interest rates each following year.		

A Review of Programs and Services in Support of Aquaculture

Nova Scotia

Program Name	Budget/Funding	Criteria	Comments
Canada/N.S. Co-Op Agreement – Resource Competitiveness Program/Strategic Sectors ➲ Category: ↳ Production ↳ Processing	➲ Assistance ranges from 25-80 % of eligible costs. Direct equity investment is required for the balance of costs.	➲ Applicants must be actively involved in the aquaculture industry and have acquired all appropriate licences, leases and permits. Eligible costs include assets paid for by applicant, related infrastructure, direct costs related to design, acquisition, construction, modification, conversion, transportation and installation. Project proposals must include the following elements; new or innovative approaches, techniques or technologies, adequate technical, operational and biological detail, a benefit to the industry as a whole and job creation. Submission of a final report was required and to be made available to interested parties.	➲ Note this program was in effect from 1996 to 2001. Assistance was available in the following general areas: salmonid culture, marine finfish culture, shellfish culture, broodstock development, product development and marketing and environmental interactions.
Nova Scotia Aquaculture Development Committee ➲ Category: ↳ Production ↳ Technical support ↳ Research	➲ Funding agency representatives sit on all technical committees and provide assessment and input regarding business aspects of aquaculture applications in addition to providing review of any major research proposals and loan requests submitted.	➲ There are currently three subcommittees operating under the aegis of the N.S.A.D.C. All have developed terms of reference and criteria that govern their review function. ➲ The Shellfish and Salmonid Finfish technical subcommittees meet on all issues and applications regarding traditional aquaculture species including new grow-out aquaculture sites, U-fish operations hatcheries and introduction and transfer issues regarding new species.	➲ The Nova Scotia Department of Agriculture and Fisheries and the Nova Scotia Economic Renewal Agency formed the Nova Scotia Aquaculture Development Committee in November 1993 as a joint initiative. The purpose was to combine the overall capabilities of any government agencies that could contribute to the promotion and development of aquaculture in Nova Scotia.

A Review of Programs and Services in Support of Aquaculture

Nova Scotia

Program Name	Budget/Funding	Criteria	Comments
Nova Scotia Aquaculture Development Committee (cont'd)		➲ The Experimental Marine Finfish Subcommittee was formed most recently to deal with growing interest and preliminary development issues of hatchery and grow-out culture of marine whitefish species, striped bass and eels. Culture of traditional highly-valued species such as halibut, haddock, and flounder are at or near commercial development in Europe and offer significant potential for N.S. over the long term. The immediate mandate of this subcommittee is to provide orderly guidance during the critical early development stages of this type of aquaculture. ➲ The technical subcommittees also consider any potentially new or existing technologies or techniques that may benefit industry in the future. Examples would include enhanced triploid (breeding) techniques, cryopreservation of shellfish larvae, broodstock development, fish health, disease control, carrying capacity and planning for currently active areas.	➲ The N.S.A.D.C. currently meets quarterly or as required. The committee has overseen review of approximately 160 applications and 40 proposals over the past 3 years as part of routine business. ➲ In addition the committee has and will continue to identify and address fundamental weaknesses in the existing infrastructure vital to substantial growth and development of the aquaculture industry in Nova Scotia. Specific efforts have been undertaken by the committee to investigate major issues by meeting with outside groups to solicit advice and information. ➲ The committee has met with representatives of A.C.O.A. Cape Breton and toured one of the major integrated salmon and trout producing facilities in the area to better understand the problems and potential opportunities present in that substantial segment of the aquaculture industry.

A Review of Programs and Services in Support of Aquaculture

Nova Scotia

Program Name	Budget/Funding	Criteria	Comments
Regional Aquaculture Development Advisory Committees (RADACs) ➲ Category: ↳ Production		➲ The criteria used by the Committee to review applications have included: current uses of the water body; possible user conflicts; the number of leases already in the water body; and site location suitability (including local area conditions, such as the amount of ice, water depth, exposure, prevalent winds, species, culture method etc).	➲ Regional Aquaculture Development Advisory Committees (RADACs) began with a pilot project in the Wedgeport and Pubnico areas. The strategy behind such an approach was to obtain a vehicle whereby the developer and the community comes to an agreement on the best way to proceed. The result of this process is then passed on to the Minister of Fisheries and Aquaculture as a recommendation. ➲ The RADACs are composed of people who represent the interests of the area. This may include fishermen, aquaculturists, recreational boaters, waterfront landowners, business operators and local politicians – in short, people and groups affected by the installation of an aquaculture site. ➲ Currently there are RADACs in operation in Digby/Annapolis, Wedgeport, Pubnico, Shelburne, Mahone Bay, the Eastern Shore, Guysborough, Isle Madame, Tatamagouche and East St. Margarets Bay. It is hoped that most areas with significant potential for aquaculture development will form community RADACs. Areas not covered by a RADAC to have input through the public hearing process.

A Review of Programs and Services in Support of Aquaculture

New Brunswick

Program Name	Budget/Funding	Criteria	Comments
Fisheries Development Board – Loan Fund & Loan Guarantee Fund ➲ Category: ↳ Production	➲ Direct loan assistance may be provided for new construction and equipment purchases of up to $500,000 to aid and encourage the establishment or development of aquaculture in the Province of New Brunswick. ➲ Loan guarantees are also available for working capital purposes. The maximum allowable loan guarantee shall be 80% of the approved operating costs only and Department liability is limited to the operating loans that are outstanding after the relative lending institution has realized on all security held in support of operating loans	➲ Applicants must not have any loans in arrears with the Department. ➲ The project must involve the production and harvesting of finfish, shellfish or aquatic plants. ➲ The project must demonstrate a potential for permanent employment opportunities or significant potential for increasing sales, and must show commercial viability. ➲ The applicant will have a minimum equity position of 20% of the total assets (including the assets to be acquired through the project). ➲ Expenditures of a normal recurring nature including working capital items and inventories such as feed, smolts and seed, are not eligible for direct loan assistance. (See loan guarantee program.) ➲ Direct loans or loan guarantees may be provided to individuals, companies, partnerships and/or associations who are residents of the Province of New Brunswick and who are operating within the Province of New Brunswick.	➲ The financial assistance program for aquaculture may be provided by way of direct loans or loan guarantees for marine shellfish and/or finfish cultivation operations.

A Review of Programs and Services in Support of Aquaculture

New Brunswick

Program Name	Budget/Funding	Criteria	Comments
Fish Health Technical Committee (FHTC) ➲ Category: ↳ Veterinary service ↳ Advisory Committee			➲ The Fish Health Technical Committee has been established under the provincial Aquaculture Act (Section 37(2)) to provide advice to the Minister of Agriculture, Fisheries and Aquaculture for the management and control of diseases of concern. The FHTC was formed in an effort by both government and industry to respond to any disease threat to the finfish aquaculture industry. The FHTC's primary role is to be an advisory committee that reports directly to the Minister of Agriculture, Fisheries and Aquaculture. It is comprised of three industry reps (3 private veterinarians), 1 provincial aquaculture veterinarian, 1 provincial fish health specialist, 1 federal fish health specialist).
Hatchery Review Committee (HRC) ➲ Category: ↳ Advisory Committee ↳ Technical support	➲ The funding agency (s) involved with each particular project are also asked to participate in the review, e.g. ACOA, Business New Brunswick, IRAP (NRC). The Committee considers both technical and financial aspects of a project and provides a recommendation to the involved funding agency (ies).	➲ All new fish hatcheries or hatcheries making significant renovations, in the province that request provincial or federal funding are reviewed by the HRC.	➲ The HRC is a multi-agency review panel composed of the provincial departments of Agriculture, Fisheries and Aquaculture, Environment and Local Government, and Natural Resources and Energy.

A Review of Programs and Services in Support of Aquaculture

New Brunswick

Program Name	Budget/Funding	Criteria	Comments

Total Development Fund
➲ Category:
  ➲ Production
  ➲ Marketing
  ➲ Technology
  ➲ Research
	➲ This fund is usually used to "top up" projects whose primary funding is derived from other sources. (The final mandate or objectives of this program are not yet available.)	➲ A wide spectrum of projects is funded, such as research, production, marketing, technology transfer, communications, etc.	➲ A development funding program of the New Brunswick Department of Agriculture, Fisheries and Aquaculture which funds projects in the agriculture, fisheries and aquaculture sectors.

Trade Assistance Program ➲ Category: ➲ Marketing	➲ Companies can be assisted with up to three projects per fiscal year, to a maximum of $3,000 per project, for a maximum of $6,000 per year. ➲ Companies can also be reimbursed for up to 50% of the total cost : 50% of return economy public transportation for up to two people for trade shows and one person for mission, or 15c per km up to a maximum of half the airfare equivalent. ➲ $100 per diem (within Canada) for up to two people up to a maximum of five days (including travel days) for trade shows and one person per mission ➲ 50% of booth rental and associated cost (including 50% of return cost only of transporting material used in company's booth).		➲ This project provides funding for attending trade shows and missions in both domestic (except the Atlantic Provinces, Quebec and Boston, since these are considered local markets) and international markets.

A Review of Programs and Services in Support of Aquaculture

New Brunswick

Program Name	Budget/Funding	Criteria	Comments
Trade Assistance Program (cont'd)	➲ $150 per diem (abroad) for up to two people for trade shows and one person per mission up to a maximum of (five days in the USA) and (10 days outside Canada & USA). (Travel days included). ➲ Assistance is available for companies hosting incoming buyers, totalling up to 50% of the return economy fare for one person and $100 per diem for one person, to a maximum of three days.		
Fish Laboratory ➲ Category: ↳ Veterinary Service			➲ The fish health laboratory services do testing of samples (mainly ISA)

A Review of Programs and Services in Support of Aquaculture

Prince Edward Island

Program Name	Budget/Funding	Criteria	Comments
Rental Incentive Program ➲ Category: ↳ Production	➲ Assistance is in the form of a rental subsidy, to a maximum of $5 per square foot with a maximum term of one year, payable on a monthly basis.		➲ The Rental Incentive Program is available as a one-time financial assistance package, in any community on the Island, for the establishment or expansion of an eligible business.
Aquaculture Technology Program ➲ Category: ↳ Technology ↳ Research ↳ Production ↳ Environment	➲ The program may provide a financial incentive of 60% of eligible expenditures to a maximum of $10,000 for project proposals. Eligible expenditures can include equipment and modifications, materials and supplies, seedstocks, design and engineering costs and site preparations. Not eligible are real estate, vehicles, salaries and wages. A contribution in kind not exceeding 10% of the project cost may be eligible provided documentation is sufficient. ➲ The Aquaculture Technology Program operates with an annual budget of $50,000.	➲ The project must offer a new or innovative approach to current aquaculture production techniques, equipment or culture stocks. Applicants must have a valid shellfish lease or fish farm permit issued by the Department of Fisheries and Oceans. A proposal must have sufficient technical, operational and biological detail to allow satisfactory assessment by the Minister of Fisheries and Oceans and Tourism.	➲ The Aquaculture Technology Program provides incentives for private aquaculture operations to develop or adopt new techniques or technologies in order to expand production, reduce production costs or otherwise increase earnings through more efficient production, to assess new approved species or to improve the environmental acceptability of aquaculture.

A Review of Programs and Services in Support of Aquaculture

Prince Edward Island

Program Name	Budget/Funding	Criteria	Comments
Aquaculture Diversification Program ➲ Category: ↳ Production	➲ Eligible applicants presenting viable projects may be offered conditional contributions for the purchase of certain assets. A one-time contribution will be calculated at 50% of eligible costs to a maximum $10,000 for the creation of a new enterprise or the diversification of an existing one. ➲ The Aquaculture Diversification Program has an annual budget of $150,000.	➲ Applicants must have a valid shellfish lease or fish farm permit issued by the Department of Fisheries and Oceans. Eligible expenditures shall be related to increased production or efficiency, and may include costs of design and engineering, site preparation and directly related infrastructure and equipment. Projects may be approved for culture of species such as oysters, clams, scallops, trout, char and salmon. Mussel culture for the purpose of the program will be considered commercialized species and projects will not be considered eligible. Projects to diversify mussel farms to include new species shall be considered.	➲ The Aquaculture Diversification Program provides incentives to stimulate diversification within the aquaculture sector. The aim is to assist current or new aquaculture ventures to assess and commercialize developmental species. The program is expected to stimulate private sector investment and create new job opportunities in the aquaculture sector. A diverse base of culture species will ensure the PEI aquaculture industry is sustained into the future.
Mussel Monitoring Program ➲ Category: ↳ Technical Service	➲ The Mussel Monitoring Program operates on an O&M budget of $75,000 and has two dedicated staff		➲ A technical service to mussel growers and processors in the management of their mussel farms by collecting and disseminating technical information. Staff of the department spend weeks visiting mussel spat collection and growing areas and providing technical information to mussel growers on spatfall, mussel meat yields, water temperature, presence of potentially toxic algae species, predators and for fouling conditions. ➲ This Division provides an advocacy role for the Department in the area of marine aquaculture.

A Review of Programs and Services in Support of Aquaculture

Prince Edward Island

Program Name	Budget/Funding	Criteria	Comments

PEI Aquaculture and Fisheries Research Initiative, Aquaculture Research Program
➲ Category:
  ➲ Research
  ➲ Training
	➲ The program cost-shares applied and developmental research projects initiated by industry associations, private businesses, educational institutions and provincial government agencies.
	➲ The program's normal maximum contribution will not exceed $60,000. It will provide $4 for every association dollar. It will match private business projects under $20,000 and provide $1 for every $3 for projects over $20,000. It will provide $1 for every $3 of public institution project funding.
	➲ Eligible costs include salaries, consulting fees, rental costs, travel, materials and supplies. Capital purchases are ineligible.
	➲ The Aquaculture and Fisheries Research Initiative (AFRI) has three programs within its mandate - the Aquaculture Research Program is one of them. AFRI started with an initial contribution of $800,000. The Department of Fisheries Aquaculture and Environment contributes $100,000 annually to the program.
		➲ The Aquaculture Research Program stimulates and supports the undertaking of high-quality scientifically valid, short term (normally 3 years or less) applied and/or developmental research that will yield economic benefits to the PEI aquaculture industry. It may also contribute to the training of highly-qualified individuals who can serve the aquaculture industry in years to come.	

A Review of Programs and Services in Support of Aquaculture

Prince Edward Island

Program Name	Budget/Funding	Criteria	Comments
Shellfish Aquaculture Financing Program ➲ Category: ➲ Production	➲ Funding is available for either a series of annual term loans, or demand loans. Up to 100% financing for lease development and crop production costs is available, as well as up to 75% of site lease and equipment costs.	➲ This program is available primarily to existing shellfish producers holding / acquiring not more than 100 acres of inter lease site (s). A farm business management plan and security (leasehold or chattel mortgage etc.) are required, and new entrants must apprentice first.	➲ This program provides funding to shellfish growers in order to facilitate the expansion of production. Eligible expenditures include the acquisition of long-term water site leases, industry specific equipment, lease site development and production costs.

Test Production Program
➲ Category :
  ➲ Processing
	➲ Financial assistance may be provide in either two ways:
	  ➲ An incentive grant forgivable over two years to undertake projects to develop processing or packaging capabilities new to an existing processing facility. The grants will be available on a 50/50 cost-shared basis and usually to a maximum of $20,000 per project; or
	  ➲ an incentive grant for projects designed to develop seafood products new to PEI. The grants may provide assistance up to 75% (90% for a recognized industry association) and usually to a maximum of $20,000 per project.
			➲ This program is designed to encourage new developments in fish processing, including packaging and product development.

A Review of Programs and Services in Support of Aquaculture

Quebec

Program Name	Budget/Funding	Criteria	Comments
Autopsies: pathology laboratories and faculty of veterinary medicine at Université de Montréal ➲ Category: ↳ Veterinary Service		➲ The animal must be referred by a veterinary practitioner; the aquaculture producer then receives the veterinarian's explanatory report. ➲ Laboratory services are billed.	➲ The performance of autopsies in pathology laboratories is a service designed primarily to detect animal diseases (pathologies). This service is provided by the Quebec centre for food and animal health inspection (CQIASA) of the Ministry of Agriculture, Fisheries and Food (MAPAQ).
Animal health improvement program (ASAQ) ➲ Category: ↳ Veterinary Service		➲ eligible farmers must use a veterinarian engaged under this program whose office is located within 55 km of his operation or, if there is no veterinarian within this radius, the closest veterinarian providing the eligible required services.	➲ This program is designed to promote: ↳ Animal health; ↳ Enhanced quality of animal sanitation ; and ↳ Access to curative care and preventive veterinary services performed by veterinary practitioners under these programs. ➲ MAPAQ covers part of the cost of curative care and preventive veterinary services performed by veterinarians to: ↳ Method: ➔ Preventive and curative veterinary services for some livestock (contact MAPAQ for details); ➔ Some veterinary procedures covered by the agreement with the Association of Veterinary Medicine Practitioners of Quebec;

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Program Name	Budget/Funding	Criteria	Comments
Food quality and animal health (QASA) (cont.)			→ Some veterinary services provided to protect an animal that is not suffering from a disease but that is part of a herd with a disease; → In urgent or specific cases, for the hiring of veterinarians required to perform procedures or veterinary services requested by the Ministry.
Health certification program for fish farms producing eggs and hatchlings. ➲ Category: ↳ Veterinary Service		**Clientele** ➲ Fish farmers producing eggs and hatchlings, holding a licence issued by MAPAQ, whose aquaculture operation is registered with MAPAQ.	**Objectives** ➲ Promote clean-up of fish farming operations and increased productivity. This assistance is designed to foster the production of eggs and hatchlings free of furunculosis, bacterial kidney disease and enteric red mouth disease from fish farms free of these diseases with recognized, certified healthy status. **Delivery / services provided** ➲ Technical assistance by veterinarians with the Food Quality and Animal Health Branch and support from its pathology laboratories; ➲ MAPAQ covers costs related to health monitoring, the analyses this requires and issue of the health certificate.

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Financial support for concerted action in the commercial fisheries and aquaculture sector ➲ Category: ↳ Production ↳ Research ↳ Marketing	**Part 1. Support for operation of the Network, Issue panels or working groups:** ➲ This assistance provides a grant covering: ↳ The salary of a professional coordinator: ➔ 100 percent of eligible expenditures, maximum of $50,000 in the first year; ➔ 90 percent of eligible expenditures, maximum of $50,000 in the second year; ➔ 80 percent of eligible expenditures, maximum of $50,000 in the third and insubsequent years. ➲ Operating costs, including members' travel: ↳ 100 percent of eligible expenditures, maximum of $25,000 a year.	➲ Eligible applicants are: ↳ The Quebec fisheries and aquaculture network; ↳ Issue panels or working groups recognized by the Network. ➲ The project must fall within the scope of Quebec's fisheries and aquaculture policy and the master plan of the Quebec fisheries and aquaculture network; have a significant impact on increased coordination among partners in the sector; entail eligible expenditures of at least $10,000. **Part 1** ➲ Demonstrate that hiring of the coordinator and/or operating costs are required to implement the action plan and that the objectives are consistent with the thrusts of Quebec's fisheries and aquaculture policy and the master plan of the Quebec fisheries and aquaculture network. ➲ At the end of each year, submit an activity report citing the major achievements and objectives attained.	➲ The Ministry of Agriculture, Fisheries and Food (MAPAQ) program "Financial support for concerted action in the commercial fisheries and aquaculture sector" supports the thrusts of Quebec's fisheries and aquaculture policy and the master plan of the Quebec fisheries and aquaculture network. ➲ It is directed towards development of the sector through the carrying out of joint projects by partners. ➲ To achieve this objective, MAPAQ provides financial support for operations and the carrying out of joint projects by the Quebec fisheries and aquaculture network and the Issues panels (see Definitions) or working groups it recognizes.

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Financial support for concerted action in the commercial fisheries and aquaculture sector (cont.)	**Part 2. Support for execution of pooling projects:** ➲ This financial assistance, which supports the carrying out of specific projects with a sectoral impact, provides $50,000 per project and may not exceed 70 percent of eligible expenditures. ➲ Any other government financial assistance for the same eligible expenditures must be deducted from financial assistance granted under this program to ensure that total government assistance does not exceed the percentages stipulated in Parts 1 and 2.	**Part 2** ➲ Types of projects eligible: ↳ Sectoral and market studies and analyses; ↳ Projects specified in the development plan, by the issue panel or working group; ↳ The type of project eligible must support overall development of the sector; ↳ The outcomes must be transferable to all partners involved and strive to enhance industry competitiveness; ↳ An activity report must be produced at the end of the project and demonstrate the objectives achieved and the benefits for the sector.	
Marketing support program for small and micro-businesses ➲ Category: ↳ Marketing		➲ An organization, group or association with a mandate from 3 to 9 biofood processing companies may submit an application for financial assistance for the companies it represents. ➲ The organization, group or association must be able to demonstrate that it will take on administrative responsibility for and management of the assistance measure.	➲ The Ministry of Agriculture, Fisheries and Food (MAPAQ) marketing support program is intended for small and micro-businesses involved in biofood processing. ➲ The program's aim is to upgrade management skills, especially the marketing function. The approach taken promotes action by biofood companies consistent with their stage of development and size.

A Review of Programs and Services in Support of Aquaculture

Quebec

Program Name	Budget/Funding	Criteria	Comments
Small and micro-business marketing support program (cont.)		➲ The company must make a minimum investment that varies depending on its average sales in the previous three years, before the Ministry will become financially involved. ➲ Work must not have started and no contractual commitments must have been made to third parties with regard to project costs before the Ministry issues a letter of offer. However, the Ministry may recognize as eligible expenditures incurred before the signing date of the letter of offer, where these are deemed relevant by one of its representatives. ➲ The applicant must submit an application through the appropriate regional marketing and processing adviser for MAPAQ. ➲ "Application form for financial assistance" ➲ "Company registration form"; ➲ Available from the Food Processing and Market Development Branch or from the MAPAQ regional marketing and processing adviser.	**Part 1** ➲ Implementation of a marketing plan within the company; **Part 2** ➲ information sharing between companies; **Part 3** ➲ new product development; **Part 4** ➲ ad hoc marketing problem solving.

A Review of Programs and Services in Support of Aquaculture

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Program Name	Budget/Funding	Criteria	Comments
Horizon Export: Biofood export development program ➲ Category: ↳ Marketing	➲ Financial assistance up to 50 percent of eligible costs for the entire project. ➲ Financial assistance for foreign travel and accommodation costs paid as a lump sum to the company or organization based on the territory covered: ↳ United States, Canada (outside Quebec): $800; ↳ Western Europe: $800; ↳ Eastern Europe: $1,200; ↳ Latin America: $1,200; ↳ Africa, Middle East: $2,000; ↳ Asia, Oceania: $2,500. ➲ Financial assistance is issued on submission of supporting documents and proof of payment.	➲ Associations and groups of Quebec biofood companies exporting or interested in exporting. ➲ Activities must cover Quebec, form part of a structured action plan and met the objectives of at least one of the four parts of the program: ↳ Positioning and development of Quebec biofood products and companies in export markets (foreign trade shows, trade missions, buyer hosting, etc.); → Acquisition, development and dissemination of marketing and trade knowledge and strategies (exploratory missions, strategy development, information sessions, etc.); → Introduction of export development services, adapted to specific conditions in target markets (technical trade services, etc.); → Promotion of an export culture in Quebec's agricultural and biofood sector (symposia, seminars, awards of excellence, media relations, etc.).	➲ "Horizon Export" is a biofood export development program with the following objectives: ↳ Develop export markets by developing all Quebec products and by promoting and positioning Quebec on the international scene; ↳ Foster and encourage partnerships within Quebec's biofood industry to maximize cohesiveness and the impact of export market development initiatives.

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Quebec

<table>
<tr><th>Program Name</th><th>Budget/Funding</th><th>Criteria</th><th>Comments</th></tr>
<tr><td>Horizon Export: Biofood export development program (cont.)</td><td></td><td>➲ Applicants must submit a self-financing plan for ongoing activities to be introduced under this program;
➲ Demonstrate the ability to take on responsibility for and management of the assistance measure.
➲ "Horizon Export: Biofood export development program – Application form for financial assistance", available from the MAPAQ Market Development Branch.</td><td></td></tr>
<tr><td>Innovation and development support for the commercial fisheries and aquaculture sector
➲ Category:
↳ Production
↳ Research
↳ Marketing</td><td>PART 1 : SUPPORT FOR INNOVATION AND DEVELOPMENT
➲ The Ministry of Agriculture, Fisheries and Food (MAPAQ) provides eligible applicants with financial assistance in the following areas:
ACTIVITIES SUPPORTED
<table><tr><th></th><th>Experimentation (1)</th><th>Pilot tests (2)</th><th>Commercial introduction</th></tr><tr><td>Financial support (maximum)</td><td>60% Cumulative 90% (*)</td><td>50% Cumulative 75%</td><td>35% Cumulative 50%</td></tr><tr><td>Investment (minimum)</td><td>10%</td><td>25%</td><td>35%</td></tr></table></td><td>➲ This program covers all companies and groups of companies in the commercial fisheries and aquaculture sector with the required authorizations or licences for their operations.
➲ A First Nations band council with its administrative office in Quebec may also be considered an eligible company if it holds the required authorizations or licences for its operations.
➲ The project must be consistent with the thrusts of Quebec's fisheries and aquaculture policy;
➲ The developer must demonstrate that it has the human, technical and financial capabilities required to carry out the project;</td><td>➲ The program "Innovation and development support for the commercial fisheries and aquaculture sector" (formerly: Commercial fisheries and aquaculture development program) supports the thrusts of Quebec's fisheries and aquaculture policy and fosters development of the sector through growth of companies in the sector, with a view to sustainable development.
Objective:
➲ Enhance the viability, diversification and versatility of companies in the fisheries products capture and processing sector;</td></tr>
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A Review of Programs and Services in Support of Aquaculture

Quebec

Program Name	Budget/Funding	Criteria	Comments
Innovation and development support for the commercial fisheries and aquaculture sector (cont.)	➲ Maximum financial assistance is $500,000 per project; ➲ Land-based commercial fish farming start-up projects; ➲ The proportion of assistance allocated to water and residue treatment equipment can be increased to 50 percent, with a view to environmental protection and sustainable development. ➲ (*) Figures establish the maximum rates for financial assistance in the project. The first reflects MAPAQ participation and the cumulative amount indicates the total for all potential government sources. ➲ (1) Experimentation ➲ Technology transfer or investigation or systematic scientific or technological research conducted by test or analysis, to create new products and/or processes or improve existing products and/or processes. ➲ (2) Pilot test ➲ The objective is to gather technical and economic data required to demonstrate the financial feasibility of an innovation.	➲ To market emerging species or stocks, MAPAQ fosters an integrated approach linking capture, processing and marketing, a project involving one or more fish harvesters, and one or more processing companies, and one or more consortia or marketing companies. ➲ Carrying out the project must not lead to undue competition among companies engaged in similar activities in Quebec, nor displace an activity within Quebec; ➲ The specific conditions for provision of financial assistance and the parties' obligations are stipulated in a financial assistance agreement.	➲ Expansion and diversification of production, as well as enhanced viability of aquaculture companies.

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Program Name	Budget/Funding	Criteria	Comments
Innovation and development support for the commercial fisheries and aquaculture sector (cont.)	**PART 2 : MARKETING SUPPORT** ➲ The financial assistance extends over two years and covers 35 percent of costs for implementing a product marketing strategy, up to a maximum of $15,000; ➲ This financial assistance targets: ➲ Marine product processing and marine biotechnology companies; ➲ Aquaculture companies directly marketing their products for human consumption.		
Innovation and technology ➲ Category: ➥ Research ➥ Technological support	➲ The mission of the Innovation and Technology Brnach of Quebec's Ministry of Agriculture, Fisheries and Food (MAPAQ) is to acquire, analyze and transfer knowledge and technology related to the development, production and processing of aquatic products to ensure sustainable development and competitiveness of Quebec's commercial fisheries and aquaculture sector. http://www.agr.gouv.qc.ca/pac/organisation/dit		

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Innovation and technology (cont.)	**PART I : RESEARCH AND DEVELOPMENT** ➲ The Innovation and Technology Branch has an annual budget of about $4.5M to execute R&D projects and monitoring, support and technology transfer activities in aquaculture (fresh and salt water) and in product development, in partnership with other institutions, organizations and the industry. ↳ Main products and services available: → Advice and consulting; → Transfer of knowledge resulting from monitoring or experimental research and development activities; → Support for scientific and technical mentoring projects; → Structuring assistance for program coordination. ➲ For this purpose, the Branch operates four innovation centres: ↳ The Grande-Rivière marine aquaculture centre (CAMGR) ; ↳ The Magdalen Islands marine aquaculture technology station (STMIM); ↳ The Freshwater fish farming technology sation in Quebec City (STPED); ↳ The Centre technologique des produits aquatiques, in Gaspé (CTPA).	**PART I** ➲ Virtually all projects are carried out in partnership with institutions, organizations or the industry.	➲ CAMGR may conduct activities in a controlled setting (pools), laboratories or in the open sea. ➲ STMIM conducts its activities in a lagoon, in the open sea or in a laboratory. ➲ STPED provides technological support for freshwater fish farming companies. ➲ CTPA conducts its activities in its test centre and laboratories (chemistry, bacteriology) and provides technological support to processing companies.

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Innovation and technology (cont.)	**PART 2 : HOSTING** ➲ The Branch and its innovation centres provide external research teams with scientific and technical expertise, office space, a documentation centre, laboratories, equipment and infrastructure so they can carry out their R&D activities in aquaculture.	**PART 2** ➲ The objectives of proposed activities and projects must be closely linked to Ministry thrusts and objectives. ➲ The institution, organization or company must demonstrate its ability to manage and carry out its project. ➲ Fees are charged for services provided, under the terms of the hosting agreement.	**PART 2** ➲ Hosting is possible at the centres in Gaspé, Grande-Rivière and the Magdalen Islands.
	PART 3 : FINANCIAL ASSISTANCE ➲ In addition to its operating and research budget, the Branch has an annual grant budget to support the following activities: ➪ R&D; ➪ Structuring of innovation files; ➪ Technological support and technology transfer; ➪ Conducted by other institutions or organizations.	**PART 3** ➲ The objectives of proposed activities and projects must be closely linked to Ministry thrusts and objectives. ➲ Assistance is limited to a maximum of $50K per project. ➲ The institution or organization must demonstrate its ability to manage and carry out the activity. ➲ Assistance is issued subject to satisfactory reports.	**PART 3** ➲ Supported projects usually complement Branch activitiesand are positioned upstream from industry projects supported by regional branches of the DGPAC (Direction générale des pêches et de l'aquiculture commerciales). ➲ Projects are often structured jointly by other partners that have a business relationship with the Branch.

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Quality support program for small agrifood businesses ➲ Category: ↳ Marketing ↳ Production	➲ The Ministry of Agriculture, Fisheries and Food (MAPAQ) provides selected groups of companies with financial assistance to hire one or more quality management consultants on shared time basis for a maximum of 12 months. ➲ The consultant's terms of reference consist of guiding entrepreneurs in development and implementation of their own quality control plan, and of providing the required training for these entrepreneurs to take charge of project monitoring. ➲ Financial assistance can cover up to 50 percent of eligible expenditures to a maximum of $5,000 per company. ➲ The total of all government financial assistance must never exceed 50 percent of eligible expenditures.	➲ A group of companies, an organization or an association with a mandate from three to six companies may submit an application for financial assistance. ➲ The applicant must demonstrate the ability to take on responsibility for and management of the assistance measure; ➲ Each applicant is eligible for only one offering under this program; ➲ At the time of the application, companies in the group must already be in operation and each must have sales of less than $5.0M in processed products in Quebec. ➲ Eligible expenditures are limited to consulting costs for one or more consultants, for quality management consulting and support services; ➲ Eligible expenditures for each participating company may not be less than $4,000.	➲ The objective of the quality mentoring program for small agro-food companies is to improve the competitiveness of companies through implementation of a structured quality control plan that ensures the safety and commercial quality of products marketed.

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Quality support program for small agrifood businesses (cont.)		➲ No form required. However, when making an application, applicants must submit the following to the Project Prioritization Committee: ↳ Submissions from at least 2 consultants or groups of consultants in quality management; ↳ The reasons for the final selection.	
Continental Aquaculture Research & Development Corporation (SORDAC) ➲ Category: ↳ Research	➲ Although this is a private non-profit organization, its budget comes mainly from the Government of Quebec, MAPAQ (=$300,000/y). ➲ SORDAC provides funding for freshwater aquaculture research and development projects. (SODIM funds saltwater aquaculture activities).	➲ Closer links between industry needs and the work of scientists are forged by directly involving customers in the selection and management of R&D activities and by encouraging the participation of partners from research, teaching and industry circles assembled in a single board of directors.	➲ Mission: SORDAC's mission is to develop a consensus on research and development (R&D) priorities by fostering effective links between researchers and producers.
Financière agricole du Québec (Quebec agricultural and agri-food financing organization)r ➲ Category: ↳ Production	➲ Producers and processors can seek support such as loans, loan guaranties, subsidies and preferential interest rates.	➲ Freshwater and marine aquaculture operations are recognized as eligible applicant sectors.	➲ The Financière agricole du Québec is a Crown Corporation managed by MAPAQ, which provides development funds for agriculture.

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Financière agricole du Québec (cont.)	➲ Guaranteed loan of up to $2,000,000 per company. For: ↳ full or part-time farmers; ↳ aspiring farmers who agree to farm full-time within the next five years; ↳ companies in which at least a 60% interest is held by individulas engaged in agriculture; ↳ companies providing goods and services; ↳ individuals wishing to acquire shares in an agricultural concern. ➲ Interest rates based on residential mortgage interest rates. ➲ Possibility of choosing a fixed rate for a period of 1, 2, 3, 4, or 5 years. ➲ Secure rate development loan: ↳ Company development loans for full-time agricultural producers. This might include farm expansion projects, introduction of new technology, embarking on a new kind of agricultural production, or meeting environmental standards (e.g., digging a manure pit) ↳ The Secure Rate Development Loan is granted for the first $250,000 the company borrows (with the exception of loans for machinery purchases)		

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Financi;ère agricole du Québec (cont.)	↳ Capped rates. With the Financière agricole du Québec's "ironclad" protection plan that reimburses any excess interest, agricultural producers never pay more than 8% interest (interest rate for a one-year loan) for the first five years of their loans. After that, the Preferred Rate applies for the next 10 years, and then the Advantage Rate for the remainder of the loan term, if any. ➲ Preferred rate loan: ↳ Guaranteed loan of up to $2,000,000 per company. ➲ For ↳ companies whose main activity is agriculture and in which a 60% interest is held by a full-time producer; ↳ aspiring farmers. The Preferred Rate is granted for the first $250,000 the company borrows (with the exception of loans for machinery purchases). ➲ For a period of 15 years, the Financière agricole du Québec repays half of all interest payments in excess of 8% (interest rate for a one-year loan).		

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Financière agricole du Québec (cont.)	➲ Lines of credit: ↳ up to $500,000 for companies in which at least a 60% interest is held by individuals engaged in agriculture; ↳ for goods and services companies, prime rate plus 1%; ↳ generally used for farm operating expenses; ↳ duration: up to five years. ➲ Establishment grant and secure rate establishment loan: ↳ for agricultural businesses whose owner or one of whose operators has a potentially profitable development project in mind. This person must be between 18 and 40 years old and must just be starting out in agriculture as a primary activity. He or she must acquire 20% of the company's shares and have at least a year's relevant experience in agriculture. ➲ Establishment grant ↳ awarded according to the level of education: ➔ Diploma of College Studies (DCS) in agriculture or the equivalent: up to $30,000; ➔ Secondary School Vocational Diploma (SSVD) in agriculture or the equivalent: up to $20,000;		

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Financière agricole du Québec (cont.)	↳ Granted for a four-year period. ↳ May be granted to four people working full-time in the same business up to a maximum of $120,000. ↳ An individual may only "qualify" a business once for an establishment grant. ↳ Establishment grants must be used for investments with long-lasting agricultural benefits (e.g., building improvements). They may also be used for agricultural or management training expenses (e.g., management courses, membership in a management pool, etc.) or for interest payments on loans. ➲ Secure rate establishment loan: ↳ A Secure Rate Establishment Loan is granted for the first $250,000 the company borrows (with the exception of loans for machinery purchases). ➲ Awarded according to the level of schooling: ↳ DCS in agriculture or the equivalent: rate capped at 6% (interest rate for a one-year loan); ↳ SSVD in agriculture or the equivalent: rate capped at 7% (interest rate for a one-year loan); ↳ Other schooling: rate capped at 8%(interest rate for a one-year loan).		

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Financière agricole du Québec (cont.)	➲ Capped rates: once again, provides invaluable protection to aspiring farmers by reimbursing all interest in excess of stated rates during the first five years of the establishment loan (Preferred Rates or Advantage Rates may be applied for the duration of the loans).		
Mariculture Industry Development Corporation (SODIM) ➲ Category: ↳ Research ↳ Production ↳ Marketing	➲ This corporation is principally funded by the government of Quebec and, to a lesser degree, by Economic Development Canada (EDC) and the Regional Concerted Action and Development Councils in Quebec's three maritime regions. ➲ Investment fund of $4M (assistance in the form of share capital, guarantees on lines of credit, loan guarantees or term notes) for creation and development or marine aquaculture companies. ➲ To date, R&D fund of $9M provided totally by MAPAQ, to date, to support research projects in response to problems identified by companies and linked to their development and performance.		➲ Mariculture Industry Development Corporation (SODIM), which provides funds for marine aquaculture development and R&D projects.

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Quebec

Program Name	Budget/Funding	Criteria	Comments
Specialized fisheries centre (CSP) and its College technology transfer centre in Grande-Rivière	➲ Training and development in aquaculture and costing (college, secondary and custom-tailored). ➲ Technology transfer to companies.		
Carleton head start centre	➲ Aquaculture training and development. (Secondary vocational diploma).		
Maritime fisheries workforce sectoral committee	➲ Support for and organization of training and development activity.		
North shore aquaculture centre (CACN)	➲ Newly created. Non-profit organization and $900K research fund for work to develop the aquaculture industry in this region.		
MAPAQ regional branches (Direction générale des pêches et de l'aquaculture commerciales - DGPAC)	➲ Also provides support and technical monitoring for aquaculture company projects, for example, under the program "Innovation and development support for the commercial fisheries and aquaculture sector."		

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Ontario

Program Name	Budget/Funding	Criteria	Comments
The Aquaculture Centre (University of Guelph) ➲ Category: ↳ Research ↳ Technical support ↳ Training			➲ The Aquaculture Centre provides extension service that includes the following: ↳ Providing general information about the aquaculture industry to farmers and the public. ↳ Sponsoring technical workshops and other programs for fish farmers. ↳ Offering troubleshooting services for on-farm problems. ↳ Publishing educational fact sheets. ↳ Assisting with technology transfer in concert with the University's aquaculture research program.
The Aquaculture Centre Research Parameters (University of Guelph) ➲ Category: ↳ Research ↳ Veterinary ↳ Technology ↳ Environment		**FISH NUTRITION RESEARCH** ➲ The fish nutrition research program investigates methods to maintain or reduce the present cost of feeding trout over the next several years, through diet reformulation or improved processing techniques, or by optimizing feeding strategies for improved efficiency.	

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Ontario

Program Name	Budget/Funding	Criteria	Comments
The Aquaculture Centre Research Parameters (University of Guelph) (cont'd)		**FISH HEALTH RESEARCH** ➲ Fish health research aims to elucidate the etiology and pathogenesis of economically significant diseases, in an attempt to offer more effective measures of control, and to provide routine surveillance and diagnosis of farmed-fish diseases. Further, effective prophylactic and therapeutic regimes for the common diseases of rainbow trout in Ontario are being developed. **FISH BREEDING AND GENETICS RESEARCH** ➲ Fish breeding and genetic research evaluates the establishment of rainbow trout strains as well as other species under Ontario conditions, with respect to spawning time, growth rate and disease resistance etc., with the long-term goal of developing a breeding program to optimize these characteristics. **ENDOCRINE, GAMETE AND GROWTH RESEARCH** ➲ Techniques are developed and assessed for the controlled manipulation of gametes and reproductive cycles. and acceleration of growth in rainbow trout.	

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Ontario

Program Name	Budget/Funding	Criteria	Comments
The Aquaculture Center Research Parameters (University of Guelph) (cont'd)		**WASTE MANAGEMENT** ➲ Physical and chemical characteristics of fish waste are determined for the purpose of developing efficient, and cost-effective design technology for manure management systems, with the specific goal of reducing the environmental impacts of fish farming. **ECONOMIC ANALYSES AND INDUSTRY CHARACTERIZATION** ➲ Quantitative measures of the industry, the design of economic models, are developed to assess new technology and programs, and to facilitate industry expansion through proactive promotion. **ENGINEERING RESEARCH** ➲ Designs and research on mechanisms for settling and management of fish waste. **WELFARE** ➲ Examination of fish stressors using biotelemetry to measure physiological responses in free-swimming fish under various environmental conditions. **SOLAR ENERGY** ➲ Research and cost effective analysis on the conversion of solar energy to heat as a means of raising water temperature to increase fish growth rate and hence time to market.	

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Ontario

Program Name	Budget/Funding	Criteria	Comments
Master of Science in Aquaculture Program (University of Guelph) ➲ Category: ↳ Training			➲ The Master of Science in Aquaculture program provides graduates with the knowledge and skills required to enter the industry as leaders. The intensive, multidisciplinary MSc (Aquaculture) program ensures that students are well versed in the many facets of cultivating economically significant cool-water and cold-water species. ➲ To ensure that students develop a range of expertise, the program encompasses courses from a range of University of Guelph departments. The scope of the course work may include aquaculture, economics, nutrition, food science, extension studies, fisheries science, disease management and the aquatic sciences.

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Ontario

Program Name	Budget/Funding	Criteria	Comments
Getting Started in Aquaculture **Aquaculture Centre (University of Guelph)** ➲ Category: ↳ Training		➲ There is a charge of $125/person ($116.82 + $8.18 GST) for the program which includes attendance at all lectures and the tour of the Research Station, as well as coffee breaks and lunch.	➲ To facilitate education and technology transfer, the Aquaculture Centre has established several interactive programs to transfer information to the private sector. Our "Getting Started in Aquaculture" workshop investigates introductory concepts and techniques in aquaculture and has been held regularly since 1988. The Aquaculture Centre at the University of Guelph receives daily requests for information related to the fish farming industry in Ontario. Many of these inquiries are from persons or groups looking for basic information on farming systems technology, species suitable for culture, economics, marketing, legislative controls, and insight into future opportunities for aquaculture development. To respond to these numerous requests, we offer full day educational workshops on a regular basis. These sessions are held at the Alma Aquaculture Research Station and cover a multitude of topics from water supplies to market outlook.

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Ontario

Program Name	Budget/Funding	Criteria	Comments

Rural Economic Development Initiative of OSTAR
➲ Category:
  ➲ Production
	➲ The Rural Economic Development Program, a $200 million, five-year program is offered by the Ontario Ministry of Agriculture, Food and Rural Affairs as a component of the Ontario Small Town and Rural (OSTAR) Development Initiative - a two-part, $600 million initiative launched in 2000 to assist rural Ontario.
	➲ The projects will be cost-shared with the provincial government. In-kind contributions will not be eligible for cost sharing.
		➲ Applicants must form partnerships or alliances among individuals, businesses, community organizations (including not-for-profit) and municipalities.
		➲ Applicants must demonstrate their ability to complete the project and carry on needed work after the project is finished.
		➲ Project approval will be based on a fully developed business case that will include:
		  ➲ A clear demonstration of the need for the project;
		  ➲ A sound financial plan, including satisfactory assessment of the applicants' financial viability, and demonstrated project feasibility;
		  ➲ The economic development potential of the project;
		  ➲ Specific outcomes and performance measures; and
		  ➲ Clear milestones and deliverables.
			➲ The program addresses barriers to economic growth, and ensures our small town and rural communities remain viable, healthy and vibrant places in which to live, work and invest by promoting:
			  ➲ A diversified business climate in rural Ontario;
			  ➲ The creation and retention of long-term jobs;
			  ➲ Investment in sectors that contribute to economic development in rural Ontario;
			  ➲ The creation of alliances or partnerships and increased quality of participation of rural stakeholders;
			  ➲ New markets and export development;
			  ➲ Economic development projects; and,
			  ➲ The development of information, tools and resources to enhance the rural economy.

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Manitoba

Program Name	Budget/Funding	Criteria	Comments
Agricultural Credit Programs: Direct Loans ➲ Category: ↳ Production	➲ Maximum of $325,000 for up to 30 year terms. Fixed interest rate loans. Five year renewable interest rate option available. Reasonable interest rates.	➲ 18 years of age or over. A Canadian citizen or landed immigrant residing in Manitoba or who will be after the loan. Net worth cannot exceed $500,000 for initial loans. The farm business must be considered potentially viable and must meet security requirements. The combined annual off-farm income of the applicant and/or spouse may not exceed $70,000 at time of application.	➲ Provides intermediate and long term loans for land, traditional and non-traditional livestock, permanent improvements, debt consolidation, farm buildings and start-up shares in "new generation" co-ops.
Agricultural Credit Programs: Corporate, Cooperative & Partnership Loans ➲ Category: ↳ Production	➲ Maximum of $650,000 for up to 30 year terms. Fixed interest rate loans. Five year renewable interest rate option available.	➲ Open to Corporations, Cooperatives, Partnerships and Producer Boards	➲ Provides financial assistance to establish and develop multiple owner farm enterprises.
Agricultural Credit Programs: Young Farmer Rebate Program ➲ Category: ↳ Production	➲ Maximum 2% rebate on the first $100,000 borrowed for the first five years of the Manitoba Agricultural Credit Corporation (MACC) loan.	➲ Persons 18 to 39 years of age inclusive, who obtain a loan from Manitoba Agricultural Credit Corporation (MACC) with a term of 5 years or more.	➲ Provides a rebate to assist farmers during the critical start-up stage of their farming operations.
Agricultural Credit Programs: Operating Loan Guarantee Program (GOL) ➲ Category: ↳ Production	➲ Loan guarantees of up to $250,000 for individuals or multi-operator farms. Repayable annually or at the completion of a production cycle. Interest rate may not exceed prime plus 1%.	➲ A Canadian citizen or landed immigrant residing in Manitoba, 18 years of age or over and principally occupied in farming. Equity in the farming operation of not less than 20% at the time of loan approval. Application must be made to participating lending institutions.	➲ Guarantees **new** lines of credit made to farmers by lending institutions for operating expenses.

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Saskatchewan

Program Name	Budget/Funding	Criteria	Comments
Regional Economic Development Authorities (REDA) Enhancement Fund ➲ Category: ➲ Production		➲ Eligible costs include pre-feasibility studies, project feasibility studies, project business plans and project management costs. The REDA Enhancement Fund can only be accessed by a Saskatchewan REDA and cannot be used to support specific entrepreneurs or businesses or for capital expenditures, renovation expenses, grants, loans or investments.	➲ The purpose of the Regional Economic Development Authorities (REDA) Enhancement Fund is to provide REDAs with additional funding resources to promote, encourage and stimulate economic development projects, and to build capacity to support economic growth.
Small Business Loans Association (SBLA) Program ➲ Category: ➲ Production	➲ Businesses can use SBLA loans to purchase assets, such as equipment. They cannot use the money for operating expenses or for repayment of existing debt. Loans are granted at competitive interest rates, which vary with each association, up to a maximum of 10% per year. Businesses have up to five years to repay their loans.	➲ Businesses eligible for SBLA loans include any companies that have experienced difficulty obtaining financing through traditional means. Businesses not eligible for assistance are those engaged in direct farming, exploration (e.g., mining and oil extraction), residential real estate and multi-level marketing schemes. Charitable organizations also do not qualify for assistance.	➲ The SBLA Program encourages diversification of the Saskatchewan economy and supports community economic development by making funding available, through community-run organizations, to beginning and non-traditional entrepreneurs.

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Saskatchewan

Program Name	Budget/Funding	Criteria	Comments
Cooperative Development Assistance Program ➲ Category: ➥ Production	➲ New co-operatives and co-operatives considering an expansion into new areas of business activity are eligible for up to $10,000 to cover eligible expenses. For-profit co-operatives, with the exception of Employment (Worker) co-operatives, incorporated under Part XXV of The Co-operatives Act, 1996, will be required to match any funding on a 50/50 basis. Not-for-profit co-operatives and Employment (Worker) Co-operatives incorporated under Part XXV of The Co-operatives Act, 1996, will be funded up to 100 per cent of eligible funding, but there should be a demonstration of member and/or community support.		➲ The purpose of the Co-operative Development Assistance Program (CDAP) is to encourage and support the development and expansion of co-operative enterprises.
Agriculture Development Fund (ADF) ➥ Production ➥ Processing ➥ Marketing ➥ Research	➲ Up to $25,000 is available to encourage development and expansion of the value added agri-food industries.	➲ Developmental activities are eligible for assistance for product development, process development, market assessment and market development.	➲ The ADF is designed to support research and development to assist in the development of an innovative, diversified and competitive agricultural and value-added economy in Saskatchewan. There are three programs managed under ADF: the Research and Development Projects Program, the Agri-Value Program, and the Strategic Research Program with the University of Saskatchewan. In past years, projects related to the production of fish feed using plant proteins and oils have been funded.

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Alberta

Program Name	Budget/Funding	Criteria	Comments
Technical Support ➲ Category: ↳ Information Service ↳ Technical Support			➲ Literature and personal assistance is provided to aid in the development of business planning for fish farming, marketing and the development of specific aquaculture food products.
Raising Fish in Your Pond Training Program ➲ Category: ↳ Training			➲ Raising fish in your pond/dugout is a course for anyone interested in raising fish for recreational purposes. The course will provide an overview of specific requirements to raise fish. This includes selecting and constructing a fish pond, licensing requirements, purchasing fish & supplies, feeding, water quality, aeration, and disease, predator & weed control. There will be speakers from the Alberta Fish Farmers Association and Alberta Agriculture, Food & Rural Development who will relate specialized knowledge and direct experience to the workshop. This can include commercial fingerling suppliers, licensing inspectors and department staff from Animal Industry's Aquaculture Section. ➲ In addition to classroom instruction, participants will have the opportunity to view various fish culture and aeration equipment, and speak directly with the industry representatives.

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British Columbia

Program Name	Budget/Funding	Criteria	Comments

The Provincial Escape Prevention Initiative
➲ Category:
  ➲ Environment
  ➲ Research
		➲ In October 2000, tougher requirements for escape prevention were incorporated into the provincial aquaculture regulation. This regulation specifies measures that must be taken by farm operators in order to prevent fish escapes.
		➲ Fisheries Inspectors from the Licensing and Enforcement Branch inspect every active salmon farm in the province a minimum of once per year, for:
		  ➲ Compliance with the Aquaculture Regulation and its escape standards;
		  ➲ Adherence to the site's submitted Management Plan, which outlines the company's production levels, species, net pen configuration and description; and
		  ➲ Compliance with any additional terms and conditions attached to the licence.
		➲ Companies are given immediate on-site feedback in writing, identifying required or recommended corrective measures.
		➲ Fisheries inspectors also complete a yearly spot audit program, randomly selecting a minimum of 10 salmon farms for a comprehensive review of operations and a full dive audit.
			➲ Ministry of Agriculture, Food and Fisheries (MAFF) staff are available to offer technical advice to industry on escape prevention and on government regulations. The Escape Prevention Initiative is built on the principle that prevention is the key to effectively managing the risks of escaped farmed salmon. The long-term goal of the Ministry of Agriculture, Food and Fisheries is to achieve zero escapes across the industry.
			➲ The province also supports the Atlantic Salmon Watch (ASW) program, which is jointly funded with Fisheries and Oceans Canada. The purpose of the program is to study the abundance, distribution and biology of Atlantic salmon in British Columbia and its adjacent waters.

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British Columbia

Program Name	Budget/Funding	Criteria	Comments
The Provincial Escape Prevention Initiative (cont'd)		➲ A report is produced annually based on the year's salmon farm inspections. It evaluates the state of the industry, and includes general findings in areas where the industry is demonstrating both good compliance and areas where improvements are recommended or required. ➲ *Escape Investigations*: provincial fisheries inspectors will also conduct an investigation any time there is an escape from a fish farm in British Columbia. Investigations generally include a visit to the site and company headquarters, interviews with farm workers and headquarters staff, and other appropriate representatives (i.e. contracted divers).	
Fish Health Initiative (finfish) ➲ Category: ↳ Veterinary Service		➲ Ministry of Agriculture, Food and Fisheries staff are available to assist proponents with the development of fish health management plans and undertake a number of programs to ensure fish health quality including a Disease Surveillance and Auditing Program.	➲ Maintaining healthy stock is essential to profitable farming. The government of British Columbia has developed a comprehensive policy designed to improve monitoring and regulation of fish health and disease issues in the aquaculture industry.

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British Columbia

Program Name	Budget/Funding	Criteria	Comments
Fish Health Initiative: Disease Surveillance and Auditing Program ➲ Category: ↳ Veterinary Service		➲ Currently, fish farms are randomly selected from various fish-health zones and sampled to verify the causes of fish mortality and to check for disease-causing agents.	➲ The Ministry of Agriculture, Food and Fisheries Disease Surveillance and Auditing Program began in November 2000. The program will improve government's information on the health of farmed stocks and allow for verification of the information that will eventually be provided in the quarterly reports from the Fish Health Database.
The Fish Health Database ➲ Category: ↳ Research ↳ Veterinary Service			➲ The provincial Fish Health Database is a private-public partnership initiative designed to improve access to and information on the health of all cultured fish stocks in British Columbia. The database is a privately operated system which will amalgamate fish health information from private aquaculture facilities and federal and provincial fish enhancement programs operated by Fisheries and Oceans Canada and the B.C. Ministry of Water, Land and Air Protection. The aquaculture industry and fish culture facilities will provide information for the database that will track and record the changing health status over time and geographically by fish health zone. ➲ The database will undergo a one-year implementation and evaluation period before coming into full use by the industry. Reports from the database on the health status of the industry will be provided to government on a quarterly basis once the database becomes fully functional.

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British Columbia

Program Name	Budget/Funding	Criteria	Comments
Fish Health Working Committee ➲ Category: ↳ Veterinary Service ↳ Advisory Committee			➲ The province has established an interagency Fish Health Working Committee to foster coordination between government and industry on implementation of the fish-health initiatives and joint development of a fish health policy. The Committee has representation from the Ministry of Agriculture, Food and Fisheries, Fisheries and Oceans Canada, and the aquaculture industry.
Shellfish Development Initiative ➲ Category: ↳ Research ↳ Production ↳ Environment		➲ Introduced in November 1998, the plan is to double the amount of Crown land available for shellfish aquaculture to 4,230 hectares within 10 years, at which time studies have indicated the industry could generate as much as $100 million annually and add 1,100 direct jobs to the industry. ➲ Shellfish pilot projects are under way at 15 sites on the North Coast and Queen Charlotte Islands in co-operation with local First Nations.	➲ Shellfish farming is an environmentally friendly activity with the potential to create significant economic opportunities for British Columbia's coastal communities and First Nations. Government has been working with coastal and First Nations communities and industry to determine acceptable siting and production levels for shellfish aquaculture within each community.

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British Columbia

Program Name	Budget/Funding	Criteria	Comments
The Pilot Project Technologies Initiative (finfish) ➲ Category: ↳ Research ↳ Production ↳ Environment ↳ Production		➲ The projects include three marine-based closed-containment systems (two for full grow-out from smolt to market size and one for smolt production only), one land-based grow-out facility, waste recovery technologies, all-female Atlantic salmon stocks, alternative protein feeds (using canola seed), organic feeds and other technologies. Each project will also have a paired conventional (open-mesh) system adjacent to the experimental technologies in order to allow comparative economic and environmental studies. ➲ The pilot projects will be monitored and evaluated over five years by MAFF. During this time proponents will submit socio-economic and environmental information and data on the performance of the various technologies. The province will use this information to assess the viability of these technologies and to identify any critical and limiting factors to their feasibility. As these limiting factors are identified, the province will work with the proponents to attempt to bridge these constraints. ➲ The province will also provide annual performance updates throughout the five-year term of the experimental projects. A full environmental, economic and social evaluation of the projects will follow the completion of the pilot technologies program.	➲ The province supports a number of facilities that are working to develop "green" rearing technologies. No direct funding is available for these projects; however, the province offers assistance in the form of rent relief, technical assistance, and preferred access to new sites. ➲ The Ministry of Agriculture, Food and Fisheries (MAFF) in conjunction with Land and Water BC and the Ministry of Water, Land and Air Protection, has approved five experimental technology farm sites. One freshwater project had been approved to rear salmon in a reclaimed mine pit.

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British Columbia

Program Name	Budget/Funding	Criteria	Comments
Quality Control (shellfish) ➲ Category: ↳ Production ↳ Research		➲ Ministry staff is involved in cadmium sampling, water sampling for fecal coliforms, and shellfish growing water classification surveys.	➲ The Ministry of Agriculture, Food and Fisheries undertakes technical work to assist Environment Canada with ensuring the safety and high quality of shellfish products ➲ The ministry also works with other agencies and the community to eliminate sources of pollution near aquaculture operations.
Siting Advice and Technical Assistance (finfish and shellfish) ➲ Category: ↳ Technical Support ↳ Environment			➲ Government staff with expertise in the areas of aquaculture management and farm siting are available to provide technical advice on government process, completion of siting applications, and on biophysical, social, operational, and site infrastructure issues. Government staff also administers aquaculture licences and tenures, review applications for new sites after they are submitted, conduct field surveys and prepare various map products to assist proponents with developing applications.

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British Columbia

Program Name	Budget/Funding	Criteria	Comments
Planning and Capability Studies (finfish and shellfish) ➲ Category: ↳ Research ↳ Production		➲ Some examples of these studies include: ↳ Shellfish culture capability studies ↳ Shellfish carrying capacity studies ↳ Finfish and Shellfish Aquaculture Opportunities Studies ↳ Baynes Sound Shellfish Action Plan ↳ Sectoral and Regional Coastal Planning Processes (led by the Ministry of Sustainable Resource Management)	➲ The province leads various coastal planning efforts, both in the form of broad integrated land use planning (which addresses a range of issues including aquaculture development), as well as issue-specific studies that focus exclusively on aquaculture. These studies and processes may identify suitable sites or areas for expansion, areas where tenure applications have a reasonable chance of success, as well as areas where habitat considerations, significant social conflicts or other issues may be barriers. These efforts focus on both the site specific and regional levels and result in the production of various map products, or policy frameworks that can assist industry by providing a more secure and certain planning context.
Farm Relocation Initiative ➲ Category: ↳ Environment		➲ As part of the Salmon Aquaculture Policy process, the B.C. government has identified 36 salmon farms to be relocated to more socially, environmentally and economically suitable sites. The new sites will ensure consistency with new environmental standards and lead to reduced impacts on wild fish, marine mammals, birds and other wildlife.	➲ Potential impacts on the marine environment can be reduced and the health of farmed fish protected by properly locating fish farms. Good water quality, physical protection for farm structures and distance from sensitive marine areas will help protect farmed salmon, wild fish and their habitat.

A Review of Programs and Services in Support of Aquaculture

British Columbia

Program Name	Budget/Funding	Criteria	Comments

Research and Development Support Programs (finfish and shellfish)
➲ Category:
  ➲ Research
  ➲ Production
		➲ The province supports several R&D programs;
		➲ Broodstock Development (finfish)
		➲ The Ministry of Agriculture, Food and Fisheries offers technical advice and support for development of salmon broodstock. Currently, the ministry is supporting chinook stock development and non-reproductive Atlantic salmon stock development. Currently, the ministry is supporting Chinook stock development and non-reproductive Atlantic salmon stock development through the Aquaculture
		➲ The province supports a research fund managed by the BC Aquaculture Research and Development Committee (BCARDC) with the assistance of the BC Science Council. Funding will be available on a competitive basis to the science community to support research on issues of importance to British Colombians.
		➲ The province also supports academic research and training though funding to UBC and Malaspina University College's Centre for Shellfish Research.
			➲ Research and development is required to move the aquaculture industry forward in the areas of production efficiencies, new species, and to address issues of public interest.

A Review of Programs and Services in Support of Aquaculture

British Columbia

Program Name	Budget/Funding	Criteria	Comments

Shellfish Aquaculture Working Capital Fund
• Category:
  ◦ Production
	• Loan Terms and Interest Rates:
	  ◦ Loan terms and interest rates will parallel the standard lending criteria of Farm Credit Canada.
	  ◦ Loans will be repayable over a 5 to 7 year term.
	  ◦ Loans for seed purchase only will be fully repayable within 3 years, or upon sale of product.
	  ◦ Loan principal payments may be deferred for initial 2 years of a loan. Interest payments must be made.
	• Loan Security Requirements:
	  ◦ Loans will be fully secured, as per normal credit lending policy. Security may take the form of a charge(s) on:
	  ▪ Tenure
	  ▪ Licence of Occupation
	  ▪ Personal property
	  ▪ Equipment
	  ▪ Leasehold interests
	  ▪ Land and buildings
	  ▪ Inventory
	• In the case of loan default, security will be acted on as per normal credit lending practice.
		• Applicants must:
		  ◦ Be Canadian citizens or have landed immigrant status, and be 18 years of age or older;
		  ◦ Have all required licence and tenure approvals in place;
		  ◦ Have a business plan, in a defined format, which indicates the commercial viability of the business, the need for financing and sources of funding; and
		• Applicants can be:
		  ◦ Individuals;
		  ◦ Sole proprietorships;
		  ◦ Partnerships, or
		  ◦ BC registered companies
		  ◦ Cooperatives
		• Applicants can apply for loan funding to assist with the following:
		  ◦ Grow-out systems, i.e. rafts, floats, lines, trays, netting. Systems must meet the industry Code of Practice;
		  ◦ Equipment;
		  ◦ Seed purchase for: oyster, clam and mussels.
		• The program will not provide funding for vehicles or construction of float houses.
			• This program is designed to meet one of the major impediments to growth of the shellfish industry – access to working capital for new entrants in the development phase of shellfish farming and for existing shellfish producers in the expansion of their farming operations. The Shellfish Aquaculture Working Capital Fund Program is a joint initiative of the British Columbia Ministry of Agriculture, Food and Fisheries and Fisheries Renewal BC working in partnership with the BC Shellfish Growers Association and Farm Credit Canada.

A Review of Programs and Services in Support of Aquaculture

British Columbia

Program Name	Budget/Funding	Criteria	Comments
Shellfish Aquaculture Working Capital Fund (cont'd)	➲ Funding: ↳ The Shellfish Aquaculture Working Capital Fund is not intended to be the sole source of project financing. ↳ Maximum loan will be $30,000 or 65% of total project costs per individual business, and ↳ Minimum loan will be $7,500. ↳ Over the term of the program the maximum outstanding loan principal per individual business is $30,000. Businesses may apply more than once.	➲	

Summary Chart of Programs and Services by Type and by Province

The information in this report has been grouped according to the following specific types of programs and services, which:

- Support production or production enhancements
- Support processing or processing enhancements
- Facilitate technology development
- Assist marketing effectiveness
- Address environmental issues
- Provide technical support
- Provide training/mentoring
- Support or engage in research
- Provide veterinary services
- Support advisory committees

Summary Chart of Programs and Services by Type and by Province

Production

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Fisheries Diversification Program ➲ Atlantic Cod Grow-out Program ➲ Mussel Production Incentive Program ➲ Mussel Technology Program ➲ Shellfish Aquaculture Working Capital Fund	➲ Fisheries and Aquaculture Loan Board ➲ Fisheries and Aquaculture Development Program ➲ Atlantic Canada Opportunities Agency ➲ Canada/ N. S. Co-op Agreement ➲ Aquaculture Development Committee ➲ Regional Aquaculture Advisory Committee	➲ Fisheries Development Board ➲ Total Development Fund	➲ Rental Incentive Program ➲ Aquaculture Technology Program ➲ Aquaculture Diversification Program ➲ Shellfish Aquaculture Financing Program	➲ Financial support for concerted action in the commercial fisheries and aquaculture sector ➲ Innovation and development support for the commercial fisheries and aquaculture sector ➲ Quality support program for small agrifood businesses ➲ Financière agricole du Québec (Quebec agricultural and agri-food financing organization)

Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
➲ University of Guelph Aquaculture Centre ➲ Rural Economic Development Initiative (OSTAR)	➲ Agricultural Credit - Program	➲ REDA Enhancement Fund ➲ SBLA Program ➲ Cooperative Development Assistance Program ➲ Agriculture Development Fund		➲ Shellfish Development Initiative ➲ Pilot Project Technologies Initiative (Finfish) ➲ Quality Control (Shellfish) ➲ Planning & Capacity Studies ➲ Research & Development Support Programs ➲ Shellfish Aquaculture Working Capital Fund

Summary Chart of Programs and Services by Type and by Province

Processing

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Atlantic Cod Grow-out Program ➲ Processing and Marketing Product Development ➲ Shellfish Aquaculture Working Capital Fund	➲ Fisheries and Aquaculture Development Program ➲ Atlantic Canada Opportunities Agency ➲ Canada/ N. S. Co-op Agreement	➲ X	➲ Test Production Program	➲ X
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
➲ X	➲ X	➲ Agriculture Development Fund	➲ X	➲ X

Technology

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Aquaculture Technology Program		➲ X	➲ Aquaculture Technology Program	➲ X
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
➲ University of Guelph Aquaculture Centre	➲ X	➲ X	➲ X	➲ Pilot Project Technologies Initiative (Finfish) ➲

Summary Chart of Programs and Services by Type and by Province

Marketing

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Fisheries Diversification Program ➲ Atlantic Cod Grow-out Program ➲ Processing and Marketing Product Development ➲ Market Research/ Market Intelligence ➲ Industry Prospecting	➲ Atlantic Canada Opportunities Agency	➲ Total Development Fund ➲ Trade Assistance Program		➲ Small and micro-business marketing support program ➲ Horizon Export: biofood export development program ➲ Quality support program for small agrifood businesses
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
		➲ Agriculture Development Fund		

Environment

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲		➲ X	➲ Aquaculture Technology Program	➲ X
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
➲ University of Guelph Aquaculture Centre				➲ Provincial Escape Prevention Initiative ➲ Shellfish Development Initiative ➲ Pilot Project Technologies Initiative (Finfish) ➲ Siting Advice & Technical Assistance (Finfish & Shellfish) ➲ Farm Relocation Initiative

Summary Chart of Programs and Services by Type and by Province

Technical Support

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Atlantic Cod Grow-out Program ➲ Shellfish & Finfish Extension Services	➲ Aquaculture Development Committee	➲ Hatchery Review Committee ➲ Total Development Fund	➲ Mussel Monitoring Program	➲ X
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
➲ University of Guelph Aquaculture Centre			➲ Information Service & Technical Support	➲ Siting Advice & Technical Assistance (Finfish & Shellfish)

Summary Chart of Programs and Services by Type and by Province

Training

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ X	➲ Aquaculture Mentorship Program	➲ X	➲ Aquaculture Research Program	➲ X
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
➲ University of Guelph			➲ Raising Fish in Ponds	➲ Research & Development Support

Summary Chart of Programs and Services by Type and by Province

Research

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Fisheries Diversification Program ➲ Mussel Technology Program	➲ Fisheries and Aquaculture Development Program ➲ Aquaculture Development Committee	➲ Total Development Fund	➲ Aquaculture Technology Program ➲ Aquaculture Research Program	➲ Financial support for concerted action in the commercial fisheries and aquaculture sector ➲ Innovation and development support for the commercial fisheries and aquaculture sector ➲ Continental Aquaculture Research and Development Corporation (SORDAC) ➲ Mariculture Development Corporation (SODIM)
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
➲ University of Guelph		➲ Agriculture Development Fund		➲ Provincial Escape Prevention Initiative ➲ Fish Health Data Base ➲ Shellfish Development Initiative ➲ Pilot Project Technologies Initiative (Finfish) ➲ Quality Control (Shellfish) ➲ Planning & Capability Studies ➲ Research & Development Support Programs

Summary Chart of Programs and Services by Type and by Province

Veterinary

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
➲ Fish Health/Veterinary Services	➲ X	➲ Fish Health Technical Committee ➲ Fish Laboratory		➲ Autopsies: pathology laboratories, Epidemic monitoring and animal health branch ➲ Food quality and animal health (QASA) ➲ Health certification program for fish farms producing eggs and hatchlings
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
				➲ Fish Health Initiative Disease Surveillance and Auditing ➲ Fish Health Data Base ➲ Fish Health Working Committee

Advisory Committee

Newfoundland	Nova Scotia	New Brunswick	PEI	Quebec
	➲ Regional Aquaculture Advisory Committee	➲ Fish Health Technical Committee ➲ Hatchery Review Committee		➲ X
Ontario	**Manitoba**	**Saskatchewan**	**Alberta**	**British Columbia**
				➲ Fish Health Working Committee